/=> d his

L6 ·

(FILE 'HOME' ENTERED AT 16:41:08 ON 04 FEB 2004)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DGENE, DRUGB, DRUGMONOG2, IMSDRUGNEWS, DRUGU, IMSRESEARCH, ..' ENTERED AT 16:41:24 ON 04 FEB 2004

	DRUGB, DRUGMONOG2,	IMSDRUGNEWS, DRUGU, IMSRESEARCH,' ENTERED AT
	16:41:24 ON 04 FEB	2004
L1	339435 S OLIGO	SACCHARIDE OR GLYCOLIPID
L2	33845 S L1 (L) (MICROORGANISM OR PLANT)
L3	1091 S L2 (L) GLYCOSYLTRANSFERASE
L4	395 S L3 (L) ACCEPTOR
L5	365 S L4 (L) (PREP? OR MAKE OR SYNTH? OR FERMENT? OR PRODU?)

340 DUP REM L5 (25 DUPLICATES REMOVED)

L7 35 S L6 AND PY<1998

=> d'ibib ab 1-35 ANSWER 1 OF 35 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN **Ļ**7 ACCESSION NUMBER: 1995-12749 BIOTECHDS Application of sucrose-synthase from rice grains for the TITLE: synthesis of carbohydrates; e.g. stereospecific oligosaccharide e.g. 20-deoxy-alpha-L-sorbofuranosyl glucose, dTDP-glucose and UDP-glucose production (conference paper) Elling L; Grothus M; Zervosen A; Kula M R AUTHOR: CORPORATE SOURCE: Univ. Dusseldorf-Heinrich-Heine; Res. Cent. Juelich-Inst. Enzyme-Technol. Institute for Enzyme Technology of the Heinrich-Heine-LOCATION: University Duesseldorf Research Center Juelich, P.O. Box 2050, 52404 Juelich, Germany. SOURCE: Ann.N.Y.Acad.Sci.; (1995) 750, 329-31 CODEN: ANYAA9 ISSN: 0077-8923 12th International Enzyme Engineering Conference, Deauville, France, 19-24 September, 1993. DOCUMENT TYPE: Journal LANGUAGE: English Enzyme-catalyzed oligosaccharide production offers an efficient way to obtain stereospecific molecules. Enzymatic production of sugars and activated sugars by plant glycosyltransferase sucrose-synthase (EC-2.4.1.13) is described. The plant enzyme catalyzed in vitro synthesis and cleavage of sucrose. The plant sucrosesynthase used nucleoside diphosphates instead of nucleoside triphosphates (used by pyrophosphorylases) to form activated sugars. At pH 7.0, space time yields of 58.8 g/l.day and 98 g/l.day were achieved for batch and continuous production, respectively, of dTDP-glucose in an enzyme membrane reactor. In the used 10 ml reactor, 980 mg of dTDP-glucose was formed with 1 U enzyme in 24 hr. Sucrosesynthase could be used for cyclic regeneration of UDP-glucose in the synthesis of N-acetyllactosamine using UDP-galactoseepimerase (EC-5.1.3.2) and beta-1,4-galactosyltransferase (EC-2.4.1.22). The synthesis reaction was used to prepare 20-deoxy-alpha-L-sorbofuranosyl-(D)-glucose in 17% yield. A variety of aldoses, ketoses and di- and trisaccharides were used as acceptor substrates with UDP-glucose as donor substrate. (9 ref) ANSWER 2 OF 35 USPATFULL on STN ACCESSION NUMBER: 2003:309002 USPATFULL Method of producing derivatives of lactosamine TITLE: INVENTOR(S): Nilsson, Kurt, Lund, SWEDEN PATENT ASSIGNEE(S): Procur AB, Lund, SWEDEN (non-U.S. corporation) KIND DATE NUMBER US 6653109 B1 20031125 PATENT INFORMATION: 19950713 WO 9518864 <---US 1996-666542 APPLICATION INFO.: 19960628 (8) WO 1995-SE10 19950109 NUMBER DATE _____ PRIORITY INFORMATION: SE 1994-34 19940106 DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED PRIMARY EXAMINER: Zeman, Mary K.

LEGAL REPRESENTATIVE: Smith, Gambrell & Russell, LLP 16 NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

997 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed is a method of producing a compound with .beta.1-4 linkage AB which contains the lactosamine structure involving reacting at least one donor substance Gal.beta.OR where R is an organic group, and at least one acceptor substance which is a glucopyranosamino derivative having the formula GlcNR"--R'", wherein NR" is an azido, 2-N-acetyl-, 2-N-phtalimido, or an organic group bound to the 2-N-group of glucosamine, wherein R'" is a glycosidically bound fluoro or is an O-, C-, N- or S-glycosidically bound aliphatic or aromatic compound, with the proviso that if NR" is NHAc then R'" is not OH and if NR" is not NHAc then R'" may be OH, in the presence of Bullera singularis or an E.C. group 3.2 glycosidase of essentially the same structure as an E.C. Group 3.2 glycosidase obtained from Bullera singularis to form the lactosamine derivative; and optionally isolating the compound with .beta.1-4 linkage which contains the lactosamine structure.

ANSWER 3 OF 35 USPATFULL on STN L7

ACCESSION NUMBER:

2002:224600 USPATFULL

TITLE:

Galactopyranosides and their use

INVENTOR(S):

Nilsson, Kurt, Lund, SWEDEN

PATENT ASSIGNEE(S):

Procur AB, Lund, SWEDEN (non-U.S. corporation)

	NUMBER	KIND	DATE		
PATENT INFORMATION:	US 6444655	B1	20020903		
	WO 9723637		19970703	•	<
APPLICATION INFO.:	US 1998-91486		19980619	(9)	
	WO 1996-SE1756		19961223		
			19980619	PCT 371 dat	te

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1995-4616	19951221
	SE 1996-58	19960104
	SE 1996-290	19960124
	SE 1996-994	19960313
	SE 1996-1309	19960402
	SE 1996-1849	19960511
	SE 1996-1891	19960515
	SE 1996-1916	19960519
	SE 1996-2844	19960718
	SE 1996-3043	19960820
	SE 1996-3434	19960918
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
DDIMADY FYAMINED.	Drate Francisco	

PRIMARY EXAMINER:

LEGAL REPRESENTATIVE:

Prats, Francisco Smith, Gambrell & Russell

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

7 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ The present invention relates to simplified synthesis, new carbohydrate-based products and practical use of different carbohydrate-based products. Examples of these are (Gal.alpha.1-3Gal), GlcNAc.beta.1-3Gal, .alpha.- or .beta.-glycosides thereof, Gal.alpha.1-3Gal- containing tri-, or higher oligosaccharides, .alpha.or .beta.-glycosides thereof, GlcNAc.beta.1-3Gal containing tri-, tetra-, or higher oligosaccharides, and derivatives and/or .alpha.- or .beta.-glycosides thereof, Gal.alpha.1-3GalGlcNAc.beta.1-3Gal, .alpha.or .beta.-glycosides thereof, Gal.alpha.1-3Gal.beta.1-4GlcNAc.beta.1-3Gal.beta.1-4Glc, or other higher oligosaccharides containing the Gal.alpha.1-3Gal-structure, .alpha.- or .beta.-glycosides thereof, modified carbohydrates, di-, tri-, oligo-, or polyfunctional products containing carbohydrate structures, and the use of the products for synthesis, affinity purification, diagnostic applications and therapy.

L7 ANSWER 4 OF 35 USPATFULL on STN

ACCESSION NUMBER:

2001:82908 USPATFULL

TITLE:

Carbohydrate derivatives and their solid-phase

synthesis

INVENTOR(S):

Schmidt, Richard R., Constance, Germany, Federal

Republic of

Rademann, Jorg, Kreuzlingen, Switzerland

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE ------PATENT INFORMATION: US 6242583 B1 20010605 WO 9745436 19971204

19971204 19981021 (9) 19970509 US 1998-171566 WO 1997-EP2393

APPLICATION INFO.:

19981021 PCT 371 date 19981021 PCT 102(e) date

<--

NUMBER DATE -----

PRIORITY INFORMATION: DE 1996-19621177 19960524

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Celsa, Bennett LEGAL REPRESENTATIVE: Keil & Weinkauf

NUMBER OF CLAIMS: 4 EXEMPLARY CLAIM: 1 1192 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to carbohydrate derivatives, to a process for

their preparation and to their use.

ANSWER 5 OF 35 USPATFULL on STN L7

ACCESSION NUMBER: 2000:77211 USPATFULL

TITLE: Method of producing derivatives of Glc-.beta.

1-4Glc-N-acetyl
INVENTOR(S): Nilsson, Kurt G. I., Lund, Sweden
PATENT ASSIGNEE(S): Bioflexin AB, Lund, Sweden (non-U.S. corporation)

NUMBER KIND DATE -----US 6077695 20000620 WO 9703206 19970130 PATENT INFORMATION: 19970130 19980616 (8) US 1998-981715 APPLICATION INFO.: WO 1995-IB561 19950713 19980616 PCT 371 date 19980616 PCT 102(e) date

DOCUMENT TYPE: FILE SEGMENT: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Prouty, Rebecca E.

LEGAL REPRESENTATIVE: Smith Gambrell & Russell, LLP.

NUMBER OF CLAIMS: 24 EXEMPLARY CLAIM: 1 LINE COUNT: 751

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed is a method of producing a compound which contains the Glc.beta.1-4GlcN structure involving reacting at least one donor substance Glc.beta.OR where R is an organic group, and at least one acceptor substance which is a glucopyranosamino derivative having the formula GlcNR"-R'", wherein NR" is an azido, 2-N-acetyl-, 2-N-phtalimido, or an organic group bound to the 2-N-group of glucosamine, wherein R'" is a glycosidically bound fluoro or is an O-, C-, N- or S-glycosidically bound aliphatic or aromatic compound, with the optional proviso that if NR" is NHAc then R'" is not OH and if NR" is not NHAc then R'" may be OH, in the presence of Bullera singularis or an E.C. group 3.2 glycosidase of essentially the same structure as an E.C. group 3.2 glucosidase obtained from Bullera singularis to form the Glc.beta.1-4GlcN derivative; and optionally isolating the compound which contains the Glc.beta.1-4GlcN structure.

ANSWER 6 OF 35 USPATFULL on STN L7

ACCESSION NUMBER: 1999:40198 USPATFULL

TITLE: Process for the complete removal of protective groups on nucleoside diphosphate and triphosphate sugars with

acetylesterase

INVENTOR(S): Oehrlein, Reinhold, Rheinfelden, Germany, Federal

Republic of

Baisch, Gabriele, Binzen, Germany, Federal Republic of

PATENT ASSIGNEE(S): Novartis AG, Basel, Switzerland (non-U.S. corporation)

WO 9624683 19960815 APPLICATION INFO.: US 1997-875882 19970806 (8)

WO 1996-EP422 19960201

19970806 PCT 371 date 19970806 PCT 102(e) date

<--

NUMBER DATE

PRIORITY INFORMATION: CH 1995-363 19950207

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Weber, Jon P.

LEGAL REPRESENTATIVE: Ferraro, Gregory D.

NUMBER OF CLAIMS: 25 EXEMPLARY CLAIM: 1 LINE COUNT: 939

PATENT INFORMATION:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the preparation of nucleoside diphosphate and triphosphate sugars wherein hydroxyl protective groups are removed enzymatically, with acetylesterase and a process for the preparation of these sugars, which comprises coupling a nucleotide with a sugar-1-phosphate activated with a carbonyl bisazole and then removing the hydroxyl protective groups enzymatically with acetylesterase.

L7 ANSWER 7 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:4983 USPATFULL

TITLE: Plants and processes for obtaining them

INVENTOR(S): Keeling, Peter Lewis, Ames, IA, United States

Lomako, Joseph, Miami, FL, United States Gieowar-Singh, Dave, Miami, FL, United States

Singletary, George William, Ankeny, IA, United States Whelan, William Joseph, Miami, FL, United States (4)

PATENT ASSIGNEE(S): Zeneca Limited, London, United Kingdom (non-U.S.

corporation)

The University of Miami, Miami, FL, United States (U.S.

corporation)

19951218 PCT 371 date 19951218 PCT 102(e) date

NUMBER DATE

PRIORITY INFORMATION: GB 1992-18185 19920826

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fox, David T.

LEGAL REPRESENTATIVE: Cushman Darby & Cushman IP Group of Pillsbury Madison &

Sutro

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1,8

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 2043

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 'Plants with an altered starch synthesizing ability are produced by incorporating into the genome of the plant at least one donor gene encoding a starch primer. The starch primer is an enzyme capable of initiating starch synthesis, such as an amylogenin and/or glycogenin.

DNA constructs encoding a starch primer are provided, particularly constructs encoding amylogenin from maize.

L7 ANSWER 8 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:4412 USPATFULL

TITLE: Compositions and methods for producing

sialyltransferases

INVENTOR(S): Paulson, James C., Del Mar, CA, United States

Wen, Xiaohong, San Diego, CA, United States Livingston, Brian, San Diego, CA, United States Burlingame, Alma L., Sausalito, CA, United States Medzihradszky, Katalin, San Francisco, CA, United

States

Kelm, Sorge, Uiel, Germany, Federal Republic of Gillespie, William, Santa Monica, CA, United States

PATENT ASSIGNEE(S): The Regents of the University of California, Oakland,

CA, United States (U.S. corporation)

Continuation-in-part of Ser. No. US 1993-102385, filed on 4 Aug 1993 which is a continuation-in-part of Ser.

on 4 Aug 1993 which is a continuation-in-part of Ser. No. US 1992-925369, filed on 4 Aug 1992, now abandoned

which is a continuation-in-part of Ser. No. US 1992-850357, filed on 9 Mar 1992, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Saidha, Tekchand

LEGAL REPRESENTATIVE: Oppenheimer Wolff & Donnelly LLP

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1

RELATED APPLN. INFO.:

NUMBER OF DRAWINGS: 23 Drawing Figure(s); 19 Drawing Page(s)

LINE COUNT: 3178

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB DNA isolates coding for sialyltransferase which contain a conserved region of homology and methods of obtaining such DNA are provided, together with expression systems for recombinant production of the various sialyltransferases.

L7 ANSWER 9 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:1634 USPATFULL

TITLE: Compositions comprising complement related proteins and

carbohydrates, and methods for producing and using said

compositions

INVENTOR(S): Rittershaus, Charles W., Malden, MA, United States

Toth, Carol A., Sharon, MA, United States

PATENT ASSIGNEE(S): T Cell Sciences, Inc., Needham, MA, United States (U.S.

corporation)

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 5856300	19990105	
	WO 9426786	19941124	<
APPLICATION INFO.:	US 1995-553339	19951113	(8)
	WO 1994-US5285	19940512	
•		19951111	PCT 371 date
		19951111	PCT 102(e) date

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

Achutamurthy, Ponnathapura PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Yankwich, Leon R., Kubinec, Jeffrey S.

NUMBER OF CLAIMS: 37 EXEMPLARY CLAIM: 1,28

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

3557 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides compositions comprising at least one complement moiety and at least one carbohydrate moiety, and methods of producing such compositions. In particular, the compositions of the invention comprise complement proteins related to the complement receptor type I, and further comprise ligands for intracellular molecules, such as selectins. In a preferred embodiment, the compositions comprise a complement-related protein in combination with the Louis X antigen or the sialyl Lewis X antigen. The compositions of the invention have use in the diagnosis or therapy of disorders involving complement activity and inflammation. Pharmaceutical compositions are also provided for treating or reducing inflammation mediated by inappropriate complement activity and intercellular adhesion.

ANSWER 10 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1998:162313 USPATFULL

Sugar-chain synthetase and process for producing the TITLE:

same

INVENTOR(S): Tsuji, Shuichi, Saitama, Japan

Kurosawa, Nobuyuki, Saitama, Japan Hamamoto, Toshiro, Saitama, Japan Lee, Young-Choon, Saitama, Japan Nakaoka, Takashi, Saitama, Japan

Kojima, Naoya, Saitama, Japan

PATENT ASSIGNEE(S): The Institute of Physical and Chemical Research,

Saitama, Japan (non-U.S. corporation)

NUMBER KIND DATE -----US 5854042 WO 9518217 PATENT INFORMATION: 19981229 19950706 <--US 1996-666367 APPLICATION INFO.: 19960819 (8) WO 1994-JP2182 19941222 19960819 PCT 371 date 19960819 PCT 102(e) date

> NUMBER DATE -----

PRIORITY INFORMATION: JP 1993-348260 19931224 JP 1994-57369 19940328 JP 1994-91507 19940428

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Patterson, Jr., Charles L. LEGAL REPRESENTATIVE: Wenderoth, Lind & Ponack, LLP

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: 1

L7

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 2054

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Novel GalNAc .alpha. 2,6-sialyltransferases P-B1 and P-B3; GalNAc .alpha. 2,6-sialyltransferase genes encoding the above GalNAc .alpha. 2,6-sialyltransferases P-B1 and P-B3; and an extracellularly releasable protein catalyzing GalNAc .alpha. 2,6-sialic acid transfer which comprises a polypeptide portion as being an active domain of the GalNAc .alpha. 2,6-sialyltransferase P-B1 or P-B3 together with a signal peptide are provided. Also provided is a process for preparing a sialyltransferases which enables efficient recovery of a sialyltransferase expressed in a large quantity in microorganisms.

1998:51472 USPATFULL ACCESSION NUMBER:

Purified saccharose-synthase, process for its TITLE:

production and its use

INVENTOR(S): Elling, Lothar, Aachen, Germany, Federal Republic of

Kula, Maria-Regina, Niederzier, Germany, Federal

Republic of

Forschungszentrum Julich GmbH, Julich, Germany, Federal PATENT ASSIGNEE(S):

Republic of (non-U.S. corporation)

NUMBER KIND DATE ------US 5750389 19980512 WO 9401540 19940120 PATENT INFORMATION:

19940120 19950106 (8) US 1995-367178 APPLICATION INFO .:

WO 1993-DE562 19930626

> 19950106 PCT 371 date 19950106 PCT 102(e) date

<--

NUMBER DATE -----

DE 1992-4221595 19920701 PRIORITY INFORMATION:

DE 1993-4304558 19930216

DOCUMENT TYPE: FILE SEGMENT: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Lankford, Jr., Leon B.

LEGAL REPRESENTATIVE: Dubno, Herbert, Myers, Jonathan

the column at a pH 8 with 50 to 500 mM KCl.

NUMBER OF CLAIMS: 7 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 15 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 714

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Nucleotide sugars, especially UDP, ADP, CDP or TDP saccharoses can be enzymatically obtained by the reaction of nucleoside diphosphates with di or trisaccharides with a saccharose synthase in which the virtual absence of nucleoside phosphatases (0.1% or less) can be ensured by special purification methods and sensitive detection. The purification of the raw extract, obtained preferably from rice grains, comprises especially the application of the ultra-filtered extract containing 50 mM KCl with a pH 8 on a sepharose Q column and a gradient elution out of

ANSWER 12 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:120488 USPATFULL

TITLE: Methods of making transgenic animals producing

oligosaccharides and glycoproteins

INVENTOR(S): Prieto, Pedro Antonio, Columbus, OH, United States

Smith, David Fletcher, Athens, GA, United States Cummings, Richard Dale, Edmond, OK, United States Kopchick, John Joseph, Athens, OH, United States

Mukerji, Pradip, Gahanna, OH, United States Moremen, Kelley Wilson, Athens, GA, United States Pierce, James Michael, Athens, GA, United States

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: US 5700671 19971223 APPLICATION INFO.: US 1995-434151 19950502 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-209132, filed on 9 Mar

1994 Utility DOCUMENT TYPE:

FILE SEGMENT: Granted
PRIMARY EXAMINER: Chambers, Jasemine C.
ASSISTANT EXAMINER: Crouch, Deborah LEGAL REPRESENTATIVE: Becker, Cheryl L.

NUMBER OF CLAIMS: 8 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 19 Drawing Figure(s); 15 Drawing Page(s) LINE 'COUNT: 1805

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to transgenic non-human mammals characterized in that the genome of said mammals contain at least one heterologous gene encoding for the production of heterologous catalytic entity selected from the group consisting of enzymes and antibodies, and wherein said catalytic entity produces a second heterologous product in the milk of said mammal. Especially useful in the practice of the invention are human glycosyltransferases and transgenic sheep, goats and cows. The heterologous product includes oligosaccharides and glycoconjugates.

ANSWER 13 OF 35 USPATFULL on STN T.7 ·

97:109744 USPATFULL ACCESSION NUMBER:

DNA sequence encoding N-acetyl-galactosamine-TITLE:

transferase

Lowe, John B., Ann Arbor, MI, United States INVENTOR(S):

Smith, Peter L., Ann Arbor, MI, United States

The Regents of the University of Michigan, Ann Arbor, PATENT ASSIGNEE(S):

MI, United States (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: US 5691180
APPLICATION INFO:: US 1994-255670 19971125 <--

19940609 (8)

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Elliott, George C. ASSISTANT EXAMINER: Riley, Jezia

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 1923

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

.beta.1,4-N-acetyl-galactosamine-transferase catalyzes the addition of N-acetyl-galactosamine in .beta.1,4-linkage to subterminal galactose substituted with an .alpha.2,3-linked N-acetyl-neuraminic acid residue.

ANSWER 14 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:91344 USPATFULL

Methods to identify hemochromatosis TITLE:

INVENTOR(S): Rothenberg, Barry E., P.O. Box 997, Del Mar, CA, United

States 92014

NUMBER KIND DATE -----

<--

19971007

PATENT INFORMATION: US 5674681
APPLICATION INFO.: US 1994-349883
DOCUMENT TYPE: Utility 19941206 (8)

DOCUMENT TYPE:

FILE SEGMENT: Granted PRIMARY EXAMINER: Horlick, Kenneth R. LEGAL REPRESENTATIVE: Fish & Richardson P.C.

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM: 2 LINE COUNT: 1877

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods to identify hemochromatosis in an individual. For example, the invention provides a method of detecting reduced association of .beta..sub.2 -microglobulin with a nonclassical MHC class I heavy chain molecule or a mutation in nonclassical MHC class I heavy chain-encoding DNA which results in a reduction of .beta..sub.2 -microglobulin-heavy chain association indicating that the individual tested has or is at risk of having hemochromatosis.

1.7 ANSWER 15 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:51981 USPATFULL

TITLE: Disaccharide inflammation inhibitors and uses thereof INVENTOR(S): Esko, Jeffrey D., 1220 30th St. South, Birmingham, AL,

United States 35205

Sarkar, Arun K., 4114 Elder Oaks Ways, Apt. D, Birmingham, AL, United States 35209

NUMBER KIND DATE ______

PATENT INFORMATION: US 5639734 19970617 APPLICATION INFO.: US 1994-359582 19941220 (8)

<--

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Fonda, Kathleen Kahler

LEGAL REPRESENTATIVE: Adler, Benjamin Aaron NUMBER OF CLAIMS: 18

1

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT:

1120

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a composition of matter comprising a biosynthetic anti-inflammatory oligosaccharide, comprising the structure of: sugar - sugar - X - R; wherein said sugar is selected from the group consisting of N-acetylneuraminic acid, galactose, N-acetylglucosamine, N-acetylgalactosamine, fucose and mannose; wherein X is a bridging atom selected from the group consisting of oxygen, sulfur, nitrogen and carbon; and wherein R is an aglycone selected from the group consisting of naphthol, naphthalenemethane, indenol, a heterocyclic derivative of indenol, a heterocyclic derivative of naphthol and a heterocyclic derivative of naphthalenemethanol. Also provided is a method of treating an inflammatory disease in an individual comprising the step of administering to said individual a therapeutically effective dose of the novel composition of the present invention.

ANSWER 16 OF 35 USPATFULL on STN

ACCESSION NUMBER: TITLE:

97:5881 USPATFULL Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the

isolation of cloned genetic sequences that determine

these structures

INVENTOR(S):

Lowe, John B., Ann Arbor, MI, United States

PATENT ASSIGNEE(S):

The Regents of the University of Michigan, Ann Arbor,

MI, United States (U.S. corporation)

KIND DATE NUMBER -----

PATENT INFORMATION:

US 5595900 19970121 US 1995-393246 19950223 (8)

APPLICATION INFO.:

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1994-220433, filed on 30 Mar 1994, now abandoned which is a division of Ser. No. US 1992-914281, filed on 20 Jul 1992, now patented, Pat. No. US 5324663 which is a continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, now abandoned

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT:

Wax, Robert A.

PRIMARY EXAMINER: ASSISTANT EXAMINER:

Prouty, Rebecca LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

43 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT:

5781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

- (ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;
- (iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

ANSWER 17 OF 35 USPATFULL on STN ACCESSION NUMBER: 97:3736 USPATFULL

Oligosaccharide enzyme substrates and inhibitors: TITLE:

methods and compositions

Wong, Chi-Huey, San Diego, CA, United States INVENTOR(S):

Ichikawa, Yoshitaka, San Diego, CA, United States

Shen, Gwo-Jenn, Carlsbad, CA, United States

PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United

States (U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION:

US 5593887 19970114 US 1995-476685 19950607 (8) APPLICATION INFO.:

Division of Ser. No. US 1994-219242, filed on 29 Mar RELATED APPLN. INFO.:

1994, now patented, Pat. No. US 5461143 which is a continuation-in-part of Ser. No. US 1992-852409, filed

on 16 Mar 1992, now abandoned which is a

continuation-in-part of Ser. No. US 1991-738211, filed

on 30 Jul 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1991-670701, filed on 18 Mar 1991, now patented, Pat. No. US 5278299 And Ser. No. US 1991-707600, filed on 30 May 1991, now

abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Fleisher, Mindy ASSISTANT EXAMINER: Weiss, Bonnie D. LEGAL REPRESENTATIVE: Welsh & Katz, Ltd.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 3572

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Oligosacaharide compounds that are substrates and inhibitors of glycosyltransferase and glycosidase enzymes and compositions containing such compounds are disclosed. A method of glycosylation is also disclosed. An E. coli transformed with phagemid CMPSIL-1, which phagemid comprises a gene for a modified CMP-sialic acid synthetase enzyme, which transformed E. coli has the ATCC accession No. 68531 is also provided.

L7 ANSWER 18 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:113838 USPATFULL

TITLE: Apparatus for the synthesis of saccharide compositions

INVENTOR(S): Roth, Stephen, Gladwyne, PA, United States

PATENT ASSIGNEE(S): NEOSE Pharmaceuticals, Inc., Horsham, PA, United States

(U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: US 5583042 19961210 APPLICATION INFO.: US 1994-215727 19940322 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-163534, filed

on 9 Dec 1993, now abandoned which is a continuation of Ser. No. US 1992-955687, filed on 2 Oct 1992, now patented, Pat. No. US 5288637 which is a continuation of Ser. No. US 1991-683810, filed on 11 Apr 1991, now

patented, Pat. No. US 5180674 which is a

continuation-in-part of Ser. No. US 1990-509560, filed

on 16 Apr 1990, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Rollins, John W. ASSISTANT EXAMINER: Prats, Francisco C.

LEGAL REPRESENTATIVE: Oblon, Sp

Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 25 EXEMPLARY CLAIM: 1 LINE COUNT: 978

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to an apparatus containing specific binary combinations of glycosyltransferases, for the synthesis of specific saccharide compositions such as, for example, oligosaccharides,

polysaccharides, glycolipids, and glycopeptides.

L7 ANSWER 19 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:77808 USPATFULL

TITLE: Methods for the synthesis of monofucosylated

oligosaccharides terminating in di-N-acetyllactosaminyl

structures

INVENTOR(S): Kashem, Mohammed A., Edmonton, Canada

Venot, Andre P., Edmonton, Canada Smith, Richard, Edmonton, Canada

PATENT ASSIGNEE(S): Alberta Research Council, Alberta, Canada (non-U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5550155 19960827

APPLICATION INFO.: US 1994-323100 19941014 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-914172, filed on 14

Jul 1992, now patented, Pat. No. US 5374655 which is a continuation-in-part of Ser. No. US 1992-889017, filed

on 26 May 1992, now abandoned which is a

continuation-in-part of Ser. No. US 1991-771259, filed

on 2 Oct 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1991-714161, filed

on 10 Jun 1991

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, III, John ASSISTANT EXAMINER: Leary, Louise N.

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis

NUMBER OF CLAIMS: 7 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1837

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Monofucosylated and monosialyated derivatives of the compound .beta.Gal(1-4).beta.GlcNAc(1-3).beta.Gal(1-4).beta.GlcNAc-OR, where R is hydrogen, a saccharide, an oligosaccharide or an aglycon moiety have

been found to be useful in modulating a cell-mediated immune

inflammatory response in mammals.

L7 ANSWER 20 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:72801 USPATFULL

TITLE: Glycosyltransferases for biosynthesis of

oligosaccharides, and genes encoding them

INVENTOR(S): Gotschlich, Emil C., New York, NY, United States

PATENT ASSIGNEE(S): The Rockefeller University, New York, NY, United States

(U.S. corporation)

NUMBER KIND DATE

______ PATENT INFORMATION: 19960813

US 5545553

19940926 (8)

<--

APPLICATION INFO.:

US 1994-312387 Utility

DOCUMENT TYPE: FILE SEGMENT:

Granted

PRIMARY EXAMINER: ASSISTANT EXAMINER: LEGAL REPRESENTATIVE:

Wax, Robert A. Hobbs, Lisa J. Klauber & Jackson

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

25 1

NUMBER OF DRAWINGS:

11 Drawing Figure(s); 11 Drawing Page(s)

2280 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to nucleic acids encoding glycosyltransferases, the proteins encoded thereby, and to methods for synthesizing oligosaccharides using the glycosyltransferases of the invention. In particular, the present application is directed to identification a glycosyltransferase locus of Neisseria gonorrhoeae containing five open reading frames for five different glycosyltransferases. The functionally active glycosyltransferases of the invention are characterized by catalyzing reactions such as adding Gal .beta.1.fwdarw.4 to GlcNAc or Glc; adding GalNAc or GlcNAc .beta.1.fwdarw.3 to Gal; and adding Gal .alpha.1.fwdarw.4 to Gal. The glycosyltransferases of the invention are particularly suited to the synthesis of the oligosaccharides Gal.beta.1.fwdarw.4GlcNAc.beta.1.fwdar w.3Gal.beta.1.fwdarw.4Glc (a mimic of lacto-N-neotetraose), GalNac.beta.1.fwdarw.3Gal.beta.1.fwdarw.4GlcNAc.beta.1.fwdarw.3Gal.beta. 1.fwdarw.4Glc.beta.1.fwdarw.4 (a mimic ganglioside), and Gal.alpha.1.fwdarw.4Gal.beta.1.fwdarw.4Glc.beta.1.fwdarw.4Hep.fwdarw.R (a mimic of the saccharide portion of globo-glycolipids).

ANSWER 21 OF 35 USPATFULL on STN

ACCESSION NUMBER:

96:31732 USPATFULL

TITLE:

Esterification of hydrophilic polyols by adsorption

onto a solid support and employing a

substrate-immiscible solvent

INVENTOR(S):

Schneider, Manfred P., Triebelsheider Weg 47, D-5600

Wuppertal 1, Germany, Federal Republic of

Laumen, Kurt E., Steinackerweg 10, D-7806 March 2,

Germany, Federal Republic of

Berger, Matthias, Melchiorstr 24, D-5000 Koln 1,

Germany, Federal Republic of

NUMBER KIND DATE -----

PATENT INFORMATION:

19960416

Feb 1992, now abandoned which is a continuation-in-part

APPLICATION INFO.: RELATED APPLN. INFO.: US 1994-193670 Continuation of Ser. No. US 1992-834678, filed on 12

19940208 (8)

<--

of Ser. No. US 1991-654979, filed on 13 Feb 1991, now

abandoned Utility Granted

FILE SEGMENT: PRIMARY EXAMINER:

DOCUMENT TYPE:

Knode, Marian C.

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE: Saucier, Sandra

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

Flehr, Hohbach, Test, Albritton & Herbert

NUMBER OF DRAWINGS: LINE COUNT:

7 Drawing Figure(s); 7 Drawing Page(s)

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ

The invention relates to methods for the production of amphiphilic products such as esters, sugar-esters, peptide-esters, glycolipids, glycoproteins, lipoproteins, peptides, and phosphates of alcohols, sugars, and nucleosides. The methods promote enzymatically catalyzed reactions between hydrophilic substrates such as glycerol, glucose, amino acids, and nucleosides, and second substrates such as free fatty acids, triglycerides, vinylesters, amino acids, and phosphates. The method is also applied to enzymatic reactions with saccharides and

polyalcohols. The hydrophilic substrates are adsorbed to finely divided solid supports such as silica gel, diatomaceous earths, or activated charcoals in order to promote the dispersion of the hydrophilic substrates within hydrophobic substrates and solvents. Hydrophobic solvents such as n-hexane and t-butylmethylether may be included in the reaction mixtures.

Reactions are conducted under non-aqueous conditions in order to promote reverse hydrolysis. Methods are provided for the production of isomerically pure 1,3-diglycerides. Further methods are disclosed for the production and specific precipitation of pure 1-monoglycerides through the use of a reactor/separator system. Enzymes used in the methods include lipases from M. mihei and P. fluorescens, glycosidases such as .beta.-galactosidase, proteases such as chymotrypsin, and acid or alkaline phosphatases. Compositions are provided comprising alcohols, carbohydrates, amino acids, or peptides adsorbed onto solid supports such as silica gel.

ANSWER 22 OF 35 USPATFULL on STN L7

ACCESSION NUMBER: 96:24844 USPATFULL

Method for measuring glycosyltransferase activity TITLE:

INVENTOR(S): Dennis, James W., Etobicoike, Canada

Siminovitch, Katherine A., Toronto, Canada

Datti, Alessandro, Terni, Italy

PATENT ASSIGNEE(S): Mount Sinai Hospital Corporation, Toronto, Canada

(non-U.S. corporation)

NUMBER KIND DATE ______

US 5501957 19960326 US 1994-293940 19940822 (8) US 5501957 PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-968865, filed on 30

Oct 1992, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Wityshyn, Michael G. ASSISTANT EXAMINER: Leary, Louise N. LEGAL REPRESENTATIVE: Bereskin & Parr

NUMBER OF CLAIMS: 28 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)

LINE COUNT: 1596

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method of assaying for glycosyltransferase activity in a sample. In a first step, a sample is reacted with a first sugar donor and an acceptor substrate to produce a transferase product. The first sugar donor and acceptor substrate are selected such that the sugar from the first sugar donor is capable of being transferred to the acceptor substrate in the presence of the glycosyltransferase to be assayed. In a second step, the transferase product is reacted with a second sugar donor having a sugar which is labelled with a labelling agent and an enzyme which is capable of transferring the sugar from the second sugar donor to the transferase product to produce a labelled transferase product and which has a higher affinity for the glycosyltransferase product compared to the affinity of the glycosyltransferase for the acceptor substrate. The labelling agent activity of the labelled transferase product or unreacted second sugar donor is assayed to determine transferase activity in the sample. A kit for assaying for glycosyltransferase activity in a sample is also described.

ANSWER 23 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:7785 USPATFULL

TITLE: Construction and use of synthetic constructs encoding

syndecan

INVENTOR (S): Saunders, Scott, Boston, MA, United States

Bernfield, Merton, Boston, MA, United States

Kato, Masato, Boston, MA, United States

PATENT ASSIGNEE(S): The Board of Trustees of the Leland Stanford Junior

University, Palo Alto, CA, United States (U.S.

corporation)

Children's Medical Center Corporation, Boston, MA,

United States (U.S. corporation)

NUMBER KIND DATE -----

US 5486599 US 1993-78683 19960123 PATENT INFORMATION:

19930617 (8) APPLICATION INFO.:

Continuation-in-part of Ser. No. US 1991-757654, filed RELATED APPLN. INFO.: on 6 Sep 1991, now abandoned And a continuation-in-part

of Ser. No. US 1992-856869, filed on 24 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-746797, filed on 12 Aug 1991, now abandoned

<---

which is a continuation-in-part of Ser. No. US 1989-331585, filed on 29 Mar 1989, now abandoned

DOCUMENT TYPE: Utility Granted

FILE SEGMENT: PRIMARY EXAMINER: Wax, Robert A. ASSISTANT EXAMINER: Moore, William W.

LEGAL REPRESENTATIVE: Engellenner, Thomas J., Vincent, Matthew P.Lahive &

Cockfield

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A purified mammalian proteoglycan, and genetic information encoding such proteoglycans, having a core polypetide molecular weight of about 30 kD

to about 35 kD, and comprising a hydrophilic amino terminal

extracellular region, a hydrophilic carboxy terminal cytoplasmic region, a transmembrane hydrophobic region between said cytoplasmic and

extracellular regions, a protease susceptible cleavage sequence extracellularly adjacent the transmembrane region of the peptide, and at least one glycosylation site for attachment of a heparan sulfate chain to said extracellular region, said glycosylation site comprising a heparan sulfate attachment sequence represented by a formula

Xac-Z-Ser-Gly-Ser-Gly, where Xac represents an amino acid residue having an acidic sidechain, and Z represents from 1 to 10 amino acid residues.

Additional peptides having this glycosylation site and genetic information useful for preparing a number of variations based on this

glycosylation site are also provided.

ANSWER 24 OF 35 USPATFULL on STN

ACCESSION NUMBER: 95:105833 USPATFULL

Carbohydrate-containing polymers, their preparation and TITLE:

Stahl, Wilhelm, Frankfurt am Main, Germany, Federal INVENTOR(S):

Republic of

Ahlers, Michael, Mainz, Germany, Federal Republic of Walch, Axel, Frankfurt am Main, Germany, Federal

Republic of

Bartnik, Eckhart, Wiesbaden, Germany, Federal Republic

Kretzschmar, Gerhard, Eschborn, Germany, Federal

Republic of

Grabley, Susanne, Koenigstein, Germany, Federal

Republic of

Schleyerbach, Rudolf, Hofheim/Taunus, Germany, Federal

Republic of

Hoechst Aktiengesellschaft, Germany, Federal Republic PATENT ASSIGNEE(S):

of (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5470843 19951128 <--APPLICATION INFO.: US 1993-165805 19931213 (8)

> NUMBER DATE ------

19921211 DE 1992-4241829 PRIORITY INFORMATION:

DE 1993-4326777 19930810

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Robinson, Douglas W. PRIMARY EXAMINER: Fonda, Kathleen Kahler ASSISTANT EXAMINER:

LEGAL REPRESENTATIVE: Foley & Lardner

14 NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM: 2689 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Carbohydrate-containing polymers which can have an HLB* of from about 10 to about 20 are disclosed. The compounds comprise a hydrophilic polymer portion, a carbohydrate portion comprising from 1 to about 20 naturally occurring, identical or different, monosaccharide units, at least one bifunctional spacer coupling the carbohydrate portion to the hydrophilic polymer portion, and a potentiator moiety. The potentiator moiety can be is a crosslinking moiety located within the hydrophilic polymer or a hydrophobic, hydrophilic or ionic moiety. Processes for the preparation and use of such polymers are also disclosed.

ANSWER 25 OF 35 USPATFULL on STN

95:95009 USPATFULL ACCESSION NUMBER:

Oligosaccharide enzyme substrates and inhibitors: TITLE:

methods and compositions

INVENTOR(S): Wong, Chi-Huey, San Diego, CA, United States

Ichikawa, Yoshitaka, San Diego, CA, United States

Shen, Gwo-Jenn, Carlsbad, CA, United States

The Scripps Research Institute, La Jolla, CA, United PATENT ASSIGNEE(S):

States (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: US 1994-219242 US 5461143 APPLICATION INFO.:

19940329 (8)

Continuation of Ser. No. US 1992-889652, filed on 26 RELATED APPLN. INFO.:

May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-852409, filed on 16 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-738211, filed on 30 Jul 1991, now abandoned which is a continuation-in-part of Ser. No. US

19951024

1991-670701, filed on 18 Mar 1991, now patented, Pat. No. US 5278299 And a continuation-in-part of Ser. No.

US 1991-707600, filed on 30 May 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Robinson, Douglas W. ASSISTANT EXAMINER: Fonda, Kathleen Kahler

Welsh & Katz, Ltd. NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM:

LEGAL REPRESENTATIVE:

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 3735

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Oligosaccharide compounds that are substrates and inhibitors of glycosyltransferase and glycosidase enzymes and compositions containing such compounds are disclosed. A method of glycosylation is also

disclosed. An E. coli transformed with phagemid CMPSIL-1, which phagemid comprises a gene for a modified CMP-sialic acid synthetase enzyme, which transformed E. coli has the ATCC accession No. 68531 is also provided.

ANSWER 26 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:110797 USPATFULL

TITLE: Methods for the synthesis of monofucosylated

oligosaccharides terminating in di-N-acetyllactosaminyl

structures

INVENTOR(S): Kashem, Mohammed, Edmonton, Canada

Venot, Andre P., Edmonton, Canada Smith, Richard, Edmonton, Canada

Alberta Research Council, Edmonton, Canada (non-U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 5374655

APPLICATION INFO.:

RELATED APPLN. INFO.:

US 5374655 19941220 US 1992-914172 19920714 (7)

Continuation-in-part of Ser. No. US 1992-889017, filed on 26 May 1992 which is a continuation-in-part of Ser. No. US 1991-771259, filed on 2 Oct 1991, now abandoned

which is a continuation-in-part of Ser. No. US

1991-714161, filed on 10 Jun 1991

DATE NUMBER -----

PRIORITY INFORMATION:

WO 1992-251 19920610

DOCUMENT TYPE: FILE SEGMENT:

Utility

PRIMARY EXAMINER:

Granted Russel, Jeffrey E.

ASSISTANT EXAMINER:

Russel, Jelle, Leary, Louise N.

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

10 1

NUMBER OF DRAWINGS:

8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT:

2027

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are methods for the preparation of monofucosylated and sialylated derivatives of the compound .beta.Gal(1-4).beta.GlcNAc(1-3).beta.Gal(1-4).beta.GlcNAc-OR. In particular, the methods of this invention provide for a multi-step synthesis wherein selective monofucosylation is accomplished on the 3-hydroxy group on only one of the GlcNAc units found in the .beta.Gal(1-4) .beta.GlcNAc (1-3) .beta.Gal (1-4) .beta.GlcNAc-OR compound. In this step, monofucosylation is achieved by use of the .alpha.(1-3)fucosyltransferase.

ANSWER 27 OF 35 USPATFULL on STN

ACCESSION NUMBER:

94:108861 USPATFULL

TITLE:

Process for producing an oligosaccharide compound by

using glycosidases from a mollusc

INVENTOR(S):

Nilsson, Kurt G. I., Lund, Sweden

PATENT ASSIGNEE(S):

Procur Aktiebolag, Lund, Sweden (non-U.S. corporation)

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 5372937	19941213	<
	WO 9102806	19910307	<
APPLICATION INFO.:	US 1992-834575	19920218	(7)
	WO 1990-SE537	19900817	
		19920218	PCT 371 date
`		19920218	PCT 102(e) date

NUMBER DATE -----

PRIORITY INFORMATION: SE 1989-27676 19890818

DOCUMENT TYPE: FILE SEGMENT:

Utility

PRIMARY EXAMINER: Griffin, Ronald W.

Granted

NUMBER OF CLAIMS: 13

EXEMPLARY CLAIM:

LEGAL REPRESENTATIVE: Beveridge, DeGrandi, Weilacher & Young

1

LINE COUNT:

627

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method of producing an oligosaccharide compound which either consists of or is a fragment or analog of the carbohydrate part in a glycoconjugate is disclosed which involves reacting

(a) at least one oligosaccharide, disaccharide, monosaccharide, or glycoside as donor substance,

- (b) at least one acceptor substance containing a monosaccharide, disaccharide, oligosaccharide, glycoside, or saccharide analog, and
- (c) at least one enzyme composition produced from a mollusc and containing E.C. group 3.2 glycosidase, or the glycosidase is at least one glycosidase which has been cloned with recombinant technique and which has at least 70% homology in its amino acid sequence with the corresponding mollusc enzyme, to form the oligosaccharide compound;

wherein the oligosaccharide compound contains

- (i) GlcNAc.beta.1-3Gal.beta. and the glycosidase is N-acetyl-.beta.-Dglucosaminidase,
- (ii) GlcNAc.beta.1-6Man.alpha. and the glycosidase is N-acetyl-.beta.-D-glucosaminidase,
- (iii) GlcNAc.beta.1-6Gal.alpha. and the glycosidase is N-acetyl-.beta.-D-glucosaminidase,
- (iv) GalNAc.beta.1-3Gal.beta. and the glycosidase is N-acetyl-.beta.-D-galactosaminidase,
- (v) GalNAc.alpha.1-3Gal.alpha. and the glycosidase is N-acetyl-.alpha.-D-galactosaminidase, or
- (vi) Fuc.alpha.1-6Gal.beta. and the glycosidase is .alpha.-L-fucosidase.

ANSWER 28 OF 35 USPATFULL on STN L7

ACCESSION NUMBER:

94:104487 USPATFULL

TITLE: INVENTOR(S): Process for solid phase glycopeptide synthesis Wong, Chi-Huey, Rancho Sante Fe, CA, United States

Schuster, Matthias, San Diego, CA, United States

The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION:

PATENT ASSIGNEE(S):

US 5369017 US 1994-191777 19941129 <--

19940204 (8)

APPLICATION INFO.:

Utility

DOCUMENT TYPE:

Granted

PRIMARY EXAMINER: Lilling, Herbert J.

LEGAL REPRESENTATIVE: Welsh & Katz, Ltd.

NUMBER OF CLAIMS: 13

EXEMPLARY CLAIM:

1

LINE COUNT:

FILE SEGMENT:

1509

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for the synthesis of a glycopeptide using a solid phase matrix is disclosed. The matrix is compatible with aqueous and organic solvents and is comprised of a silica-based solid support to which is linked a two-part spacer group having a chain length of about 12 to about 40 methylene groups. The first part of the spacer is covalently bonded to the silica-based support and has a length of about 3 to about 10 methylene groups. The second spacer part is covalently bonded to the first part of the spacer and comprises the distal end of the two part spacer. The second part is soluble as a free molecule in each of water, dimethylformamide and dichloromethane and has a terminal amine or hydroxyl group to which the C-terminal residue of the peptide portion of the glycopeptide chain is bonded. The chain of atoms connecting the desired glycopeptide to the solid phase matrix also includes a moiety having a selectively severable bond which on cleavage of that bond separates the matrix from whatever else is bonded to that moiety.

L7 ANSWER 29 OF 35 USPATFULL on STN

ACCESSION NUMBER:

94:86398 USPATFULL

TITLE:

Methods for the enzymatic synthesis of alpha-sialylated

oligosaccharide glycosides

INVENTOR(S):

Venot, Andre P., Agoura Hills, CA, United States

Unger, Frank M., Vienna, Austria

Kashem, Mohammed A., Agoura Hills, CA, United States

Bird, Paul, Edmondton, Canada

Mazid, M. Abdul, Novato, CA, United States

Alberta Research Council, Edmonton, Canada (non-U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE -----

US 5352670

PATENT INFORMATION: APPLICATION INFO.: US 5352670 19941004 US 1991-771007 19911002 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-714161, filed

on 10 Jun 1991

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

Wityshyn, Michael G. Leary, Louise N. PRIMARY EXAMINER: ASSISTANT EXAMINER:

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM:

15 Drawing Figure(s); 13 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 3034

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are methods for the enzymatic synthesis of alpha-sialylated oligosaccharide glycosides. Specifically, in the disclosed methods, sialyltransferase is activated to transfer an analogue of sialic acid, employed as its CMP-nucleotide derivative, to an oligosaccharide glycoside. The analogue of sialic acid and the oligosaccharide employed in this method are selected to be compatible with the sialyltransferase employed.

ANSWER 30 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:55482 USPATFULL

TITLE:

Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the

isolation of cloned genetic sequences that determine

these structures

Lowe, John B., Ann Arbor, MI, United States INVENTOR(S):

The Regents of the University of Michigan, Ann Arbor, PATENT ASSIGNEE(S):

MI, United States (U.S. corporation)

NUMBER KIND DATE ------

US 5324663 19940628 US 1992-914281 19920720 PATENT INFORMATION:

APPLICATION INFO.: 19920720 (7)

Continuation-in-part of Ser. No. US 1991-715900, filed RELATED APPLN. INFO.:

on 19 Jun 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1990-627621, filed

on 12 Dec 1990, now abandoned which is a

continuation-in-part of Ser. No. US 1990-479858, filed

on 14 Feb 1990, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A. ASSISTANT EXAMINER: Prouty, Rebecca

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt

NUMBER OF CLAIMS: 11 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 43 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT: 5605

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence

of a particularly glycosyltransferase activity in an extract of said cell;

- (ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;
- (iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

ANSWER 31 OF 35 USPATFULL on STN

ACCESSION NUMBER:

94:15661 USPATFULL

TITLE:

Apparatus for the synthesis of saccharide compositions

INVENTOR(S):

Roth, Stephen, Gladwyne, PA, United States

PATENT ASSIGNEE(S):

The Trustees of the University of Pennsylvania,

Philadelphia, PA, United States (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION:

US 5288637 19940222

APPLICATION INFO.:

US 1992-955687 19921002 (7)

DISCLAIMER DATE:

20100119

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1991-683810, filed on 11 Apr 1991, now patented, Pat. No. US 5180674 which is a continuation-in-part of Ser. No. US 1990-509560, filed

<--

on 16 Apr 1990, now abandoned

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT:

Warden, Robert J.

PRIMARY EXAMINER: ASSISTANT EXAMINER:

Tran, Hien

LEGAL REPRESENTATIVE:

Oblon, Spivak, McClelland, Maier &

NUMBER OF CLAIMS:

73

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

3 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT:

1209

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An apparatus for a glycosyltransferase-catalyzed synthesis of a

tetrasaccharide composition of the formula gal-glcNAc-gal-B-1,4-glc from saccharide units and an acceptor moiety. The apparatus has a reactor, an inlet, an outlet, and contains two glycosyltransferases; an N-acetyl glucosaminyltransferase and a galactosyltransferase.

ANSWER 32 OF 35 USPATFULL on STN

ACCESSION NUMBER:

93:106938 USPATFULL

TITLE: INVENTOR(S): Synthetic method for enhancing glycoprotein stability Bergh, Michel L. E., Somerville, MA, United States Hubbard, S. Catherine, Somerville, MA, United States

Rasmussen, James R., Ithaca, NY, United States

PATENT ASSIGNEE(S):

Massachusetts Institute of Technology, Cambridge, MA,

United States (U.S. corporation)

NUMBER KIND DATE ----- -----

PATENT INFORMATION:

US 5272066 19931221

APPLICATION INFO.:

US 1991-785913 19911104 (7)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1989-337294, filed on 13 Mar 1989, now abandoned which is a division of Ser. No. US 1986-837604, filed on 7 Mar 1986, now patented, Pat.

No. US 4925796

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Naff, David M.

ASSISTANT EXAMINER:

Weber, Jon

LEGAL REPRESENTATIVE:

Kilpatrick & Cody

NUMBER OF CLAIMS:

13

EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT:

1361

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for modifying eukaryotic and prokaryotic proteins to extend their in vivo circulatory lifetimes. In the preferred embodiment, enzymatic and/or chemical treatments are used to produce a modified protein carrying one or more covalently attached trisaccharide, sialic acid.fwdarw.galactose.fwdarw.N-acetylglucosamine.fwdarw.(SA.fwdarw.Gal.f wdarw.GlcNAc.fwdarw.), or tetrasaccharide (SA.fwdarw.Gal.fwdarw.GlcNAc.f wdarw.GlcNAc.fwdarw.) moieties. The method can be applied to any natural or recombinant protein possessing asparagine-linked oligosaccharides or to any non-glycosylated protein that can be chemically or enzymatically derivatized with the appropriate carbohydrate units. Following injection into an animal, the modified glycoproteins are protected from premature clearance by cells of the liver and reticulo-endothelial system which recognize and rapidly internalize circulating glycoproteins with carbohydrate chains containing terminal Gal, GlcNAc, fucose or mannose residues. The method can also be used to mask antigenic determinants on foreign proteins which would otherwise pro

The United States Government has certain rights in this invention by virtue of National Institutes of Health grants No. CA26712, GN31318, and CA14051.

ANSWER 33 OF 35 USPATFULL on STN

ACCESSION NUMBER:

93:5335 USPATFULL

TITLE:

Saccharide compositions, methods and apparatus for

their synthesis

INVENTOR(S):

Roth, Stephen, Gladwyne, PA, United States The Trustees of the University of Pennsylvania, Philadelphia, PA, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

PATENT ASSIGNEE(S):

-----US 5180674 19930119

APPLICATION INFO.:

RELATED APPLN. INFO.:

US 1991-683810 19910411 (7)

Continuation-in-part of Ser. No. US 1990-509560, filed

on 16 Apr 1990, now abandoned

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT:

Kummert, Lynn M.

PRIMARY EXAMINER: ASSISTANT EXAMINER:

Tran, Hien

LEGAL REPRESENTATIVE:

Oblon, Spivak, McClelland, Maier & Neustadt

NUMBER OF CLAIMS:

25

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

3 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT:

1013

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method and an apparatus for preparing saccharide compositions is

disclosed. The m

GOVERNMENT SUPPORT

Portions of this invention were supported by National Science Foundation Grant DCB8817883.

ANSWER 34 OF 35 USPATFULL on STN

ACCESSION NUMBER:

91:44737 USPATFULL

TITLE:

Novel pyrrolizidine alkaloid

INVENTOR(S):

Elbein, Alan D., San Antonio, TX, United States Tropea, Joseph E., San Antonio, TX, United States

PATENT ASSIGNEE(S):

The Board of Regents, The University of Texas System,

19881223 (7)

Austin, TX, United States (U.S. corporation)

NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.:

US 5021427 US 1988-289907 19910604

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Brown, Johnnie R. Webber, Pamela S.

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE:

Arnold, White & Durkee

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

9 1

NUMBER OF DRAWINGS:

17 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT:

1240

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention involves a purified bioactive compound of the formula: ##STR1## wherein at least one of R.sub.1, R.sub.2, R.sub.3 and R.sub.4 are H or an acyl having less than about five carbon atoms. More specifically the preferred purified bioactive compound is (1R, 1R, 3R, 7S, 7aR) -3-hydroxymethyl-1,2,7-trihydroxypyrrolizidine.

ANSWER 35 OF 35 USPATFULL on STN

ACCESSION NUMBER:

90:38369 USPATFULL

TITLE:

Method for enhancing glycoprotein stability

KIND

INVENTOR(S):

Bergh, Michel L. E., Somerville, MA, United States Hubbard, S. Catherine, Somerville, MA, United States

Rasmussen, James R., Ithaca, NY, United States

PATENT ASSIGNEE(S):

Massachusetts Institute of Technology, Cambridge, MA,

United States (U.S. corporation)

NUMBER

DATE

PATENT INFORMATION:

US 4925796

19900515

US 1986-837604

<---

APPLICATION INFO.:

19860307 (6)

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Wax, Robert

LEGAL REPRESENTATIVE:

Kilpatrick & Cody

NUMBER OF CLAIMS:

28

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

10 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT:

1445

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ

A method for modifying eukaryotic and prokaryotic proteins to extend their in vivo circulatory lifetimes. In the preferred embodiment, enzymatic and/or chemical treatments are used to produce a modified protein carrying one or more covalently attached trisaccharide, sialic acid.fwdarw.galactose.fwdarw.N-acetylglucosamine.fwdarw.(SA.fwdarw.Gal.f wdarw.GlcNac.fwdarw.), or tetrasaccharide (SA.fwdarw.Gal.fwdarw.GlcNAc.f wdarw.GlcNAc.fwdarw.) moieties. The method can be applied to any natural or recombinant protein possessing asparagine-linked oligosaccharides or to any non-glycosylated protein that can be chemically or enzymatically derivatized with the appropriate carbohydrate units. Following injection into an animal, the modified glycoproteins are protected from premature clearance by cells of the liver and reticulo-endothelial system which recognize and rapidly internalize circulating glycoproteins with carbohydrate chains containing terminal Gal, GlnNAc, fucose or mannose residues. The method can also be used to mask antigenic determinants on foreign proteins which would otherwise produce an immune response or to "target" a protein for recognition by sugar-specific cell surface receptors.